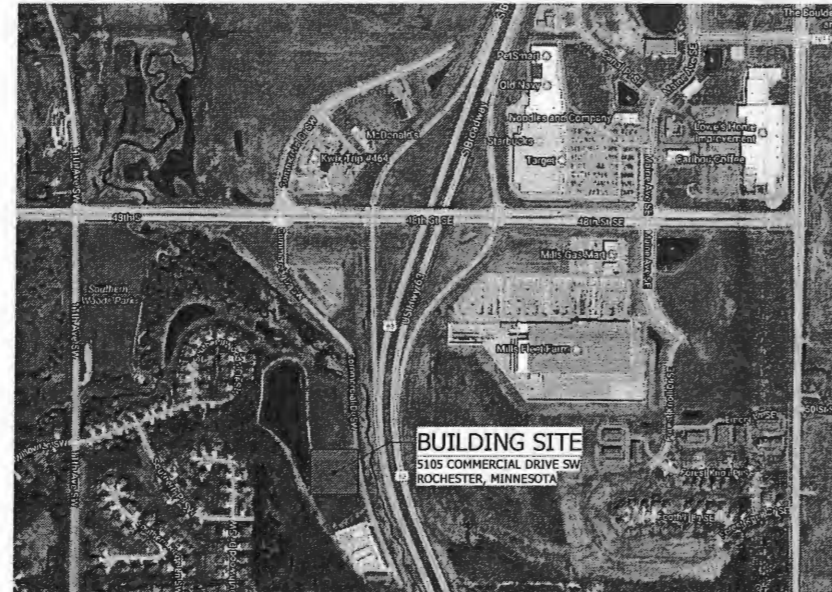


# Heartland Gun Club and Range



1 SITE LOCATION MAP



Architecture | Engineering | Planning  
Hammel, Green and Abrahamson, Inc.  
202 1st Avenue SW  
Rochester, Minnesota USA 55902  
Telephone 507.281.8600 Facsimile 507.281.8688

hga commission number: 4029-001-00  
NOVEMBER 1, 2017

## CITY REVIEW - CUP APPLICATION

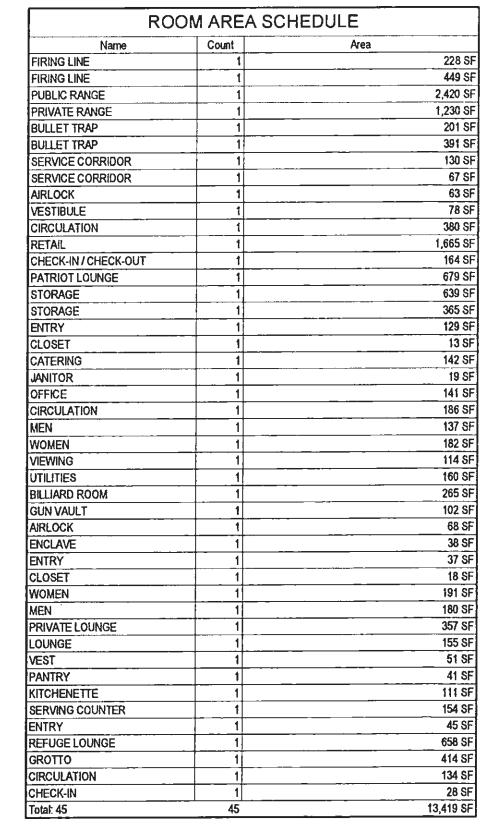


DRAWING INDEX - CUP APPLICATION	
NUMBER	SHEET NAME
AP201	FLOOR PLAN
AP400	EXTERIOR ELEVATIONS
AP401	BUILDING SECTIONS
C000	TOPO AND BOUNDARY SURVEY
C300	SITE LAYOUT AND SURFACING PLAN
C400	SITE GRADING AND UTILITY PLAN
E030	ELECTRICAL SITE PLAN
RE000	RANGE EQUIPMENT DRAWING

### PROJECT INFORMATION

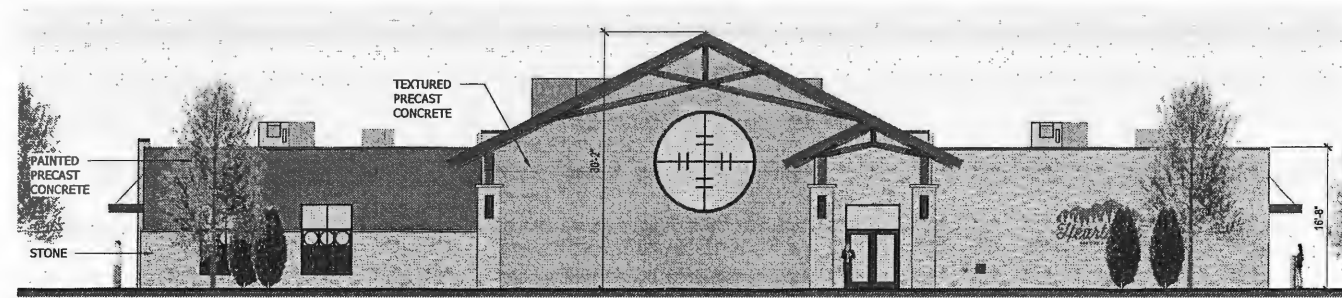
PROJECT NAME: HEARTLAND GUN CLUB AND RANGE  
PROJECT ADDRESS: 5105 COMMERCIAL DRIVE SW  
ROCHESTER, MN  
PROJECT DESCRIPTION: GUN CLUB, RETAIL SALES AND INDOOR SHOOTING RANGE  
OCCUPANCY: A-3 MIXED OCCUPANCY: NO  
PROPOSED USE: INDOOR RECREATION ZONING DISTRICT: B-4  
REQUIRED FIRE SEPARATION: N/A TYPE OF CONSTRUCTION: V-B  
GROSS SQUARE FEET: 15,000 SF  
HEIGHT OF BUILDING: 30'-4" STORIES: 1  
ALLOWABLE FLOOR AREA (WITH AREA INCREASES): 28,500 SF  
MAXIMUM HEIGHT OF BUILDING: 40'-0" MAXIMUM NUMBER OF STORIES: 1

Rochester-Olmsted Planning  
Department  
RECEIVED  
NOV 01 2017

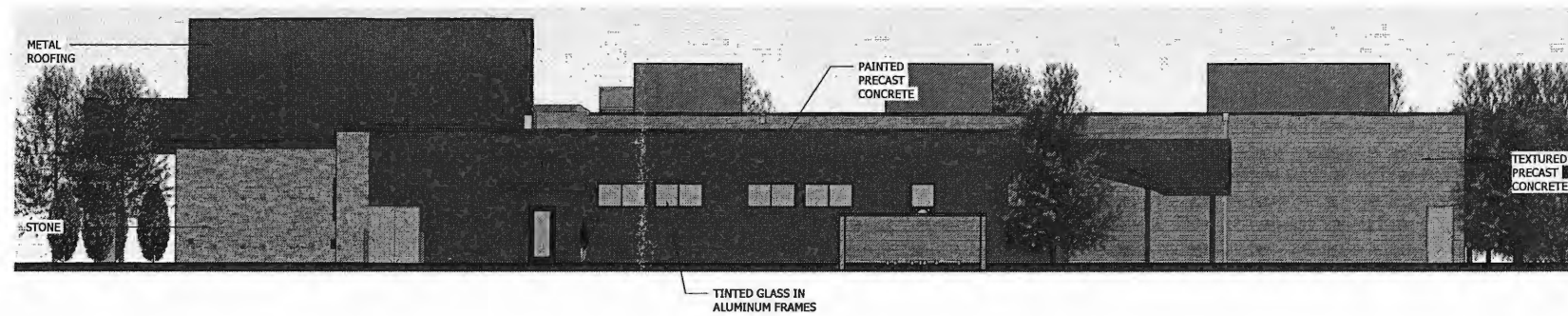


GROSS AREA: 14,825 SF





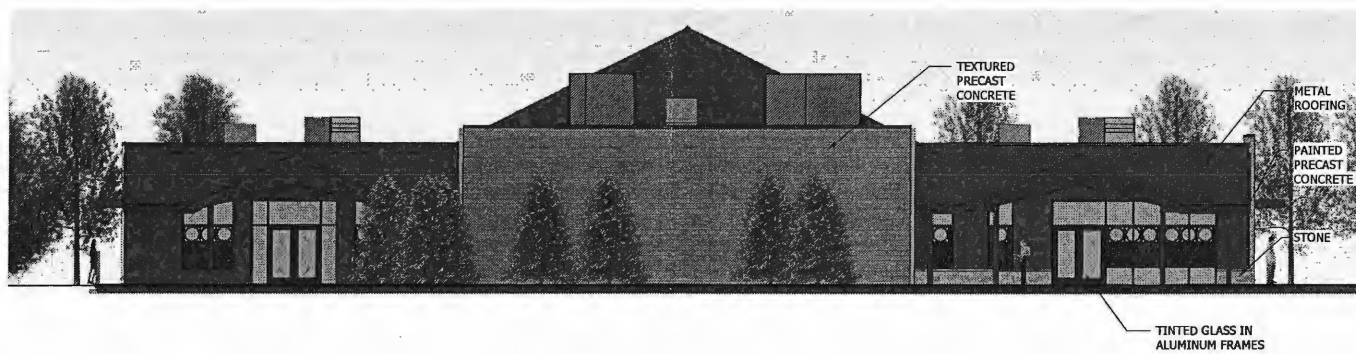
1 EAST ELEVATION  
1/8" = 1'-0"



2 NORTH ELEVATION  
1/8" = 1'-0"

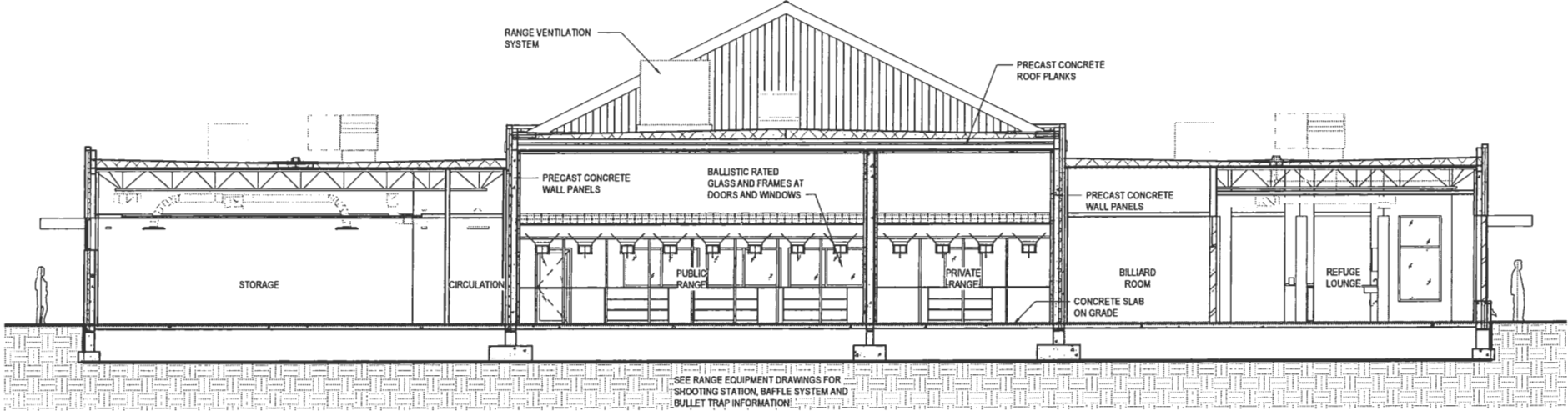


3 SOUTH ELEVATION  
1/8" = 1'-0"

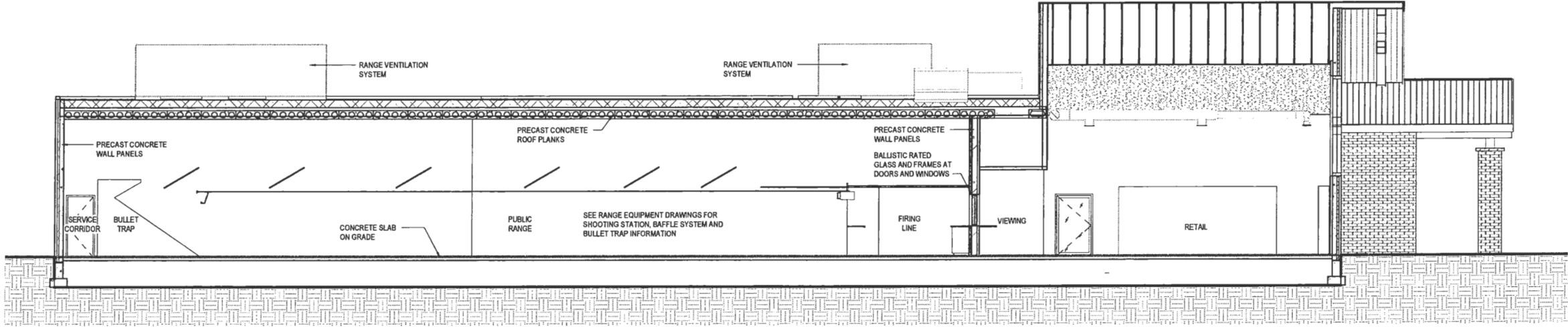


4 WEST ELEVATION  
1/8" = 1'-0"





1 BUILDING CROSS SECTION



2 BUILDING SECTION

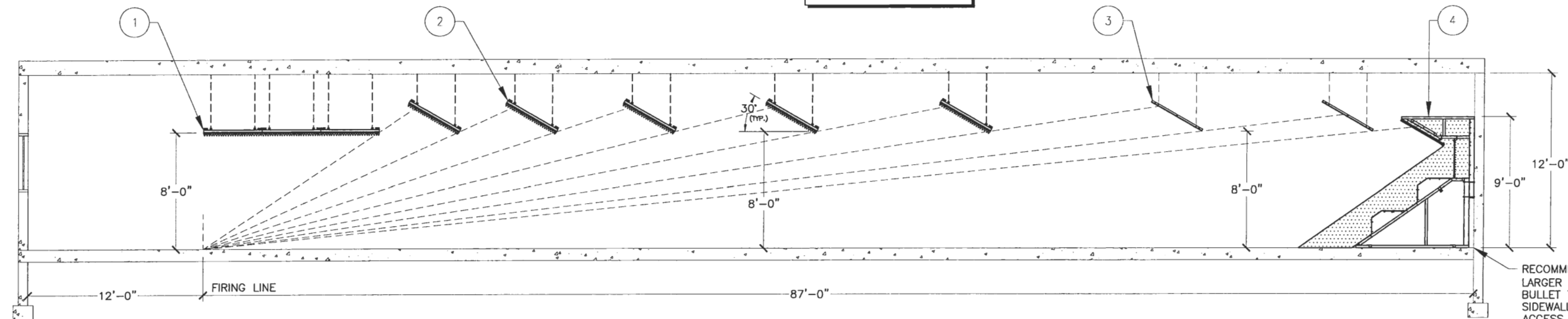


## IMPORTANT SAFETY NOTICE

RANGE SAFETY DEPENDS CHIEFLY UPON RANGE DISCIPLINE. USE OF EYE AND HEARING PROTECTION SHOULD BE MANDATORY.

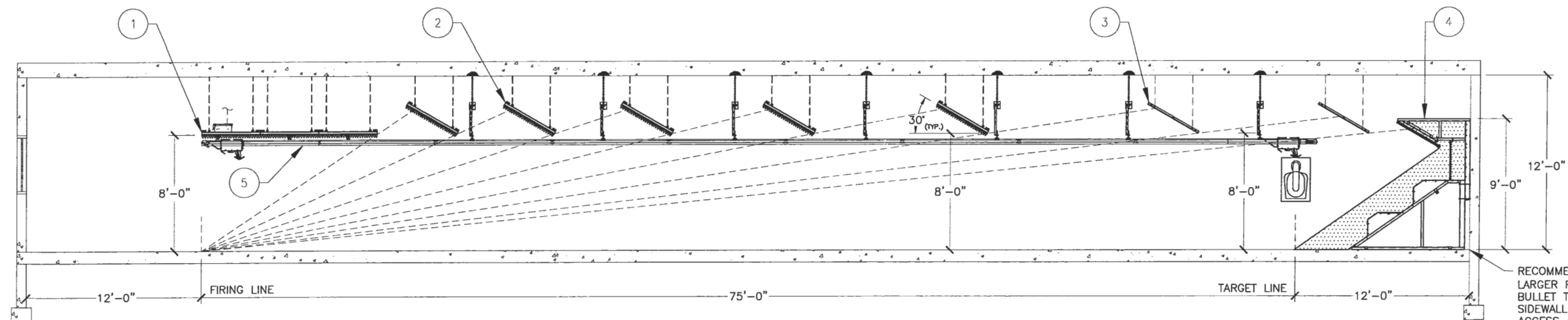
REVISION HISTORY						
ENG. APP.	DATE	ECN	LTR	REVISIONS	DATE	DOC. APP.

ITEM	DESCRIPTION
1.	SAFETY CEILING MODEL JG12
2.	CEILING BAFFLE MODEL JA4
3.	REDIRECTIVE GUARD MODEL JR5
4.	BULLET TRAP MODEL LE7500—OTR
5.	WIRELESS MONORAIL TARGET SYSTEM MODEL XWT





RECOMMENDED - BUT NOT REQUIRED - FOR  
LARGER RANGES, ADD 3'-4' OF SPACE BEHIND  
BULLET TRAP - FOR EASIER FUTURE ACCESS.  
SIDEWALL OR REAR WALL DOOR NEEDED TO  
ACCESS AREA.

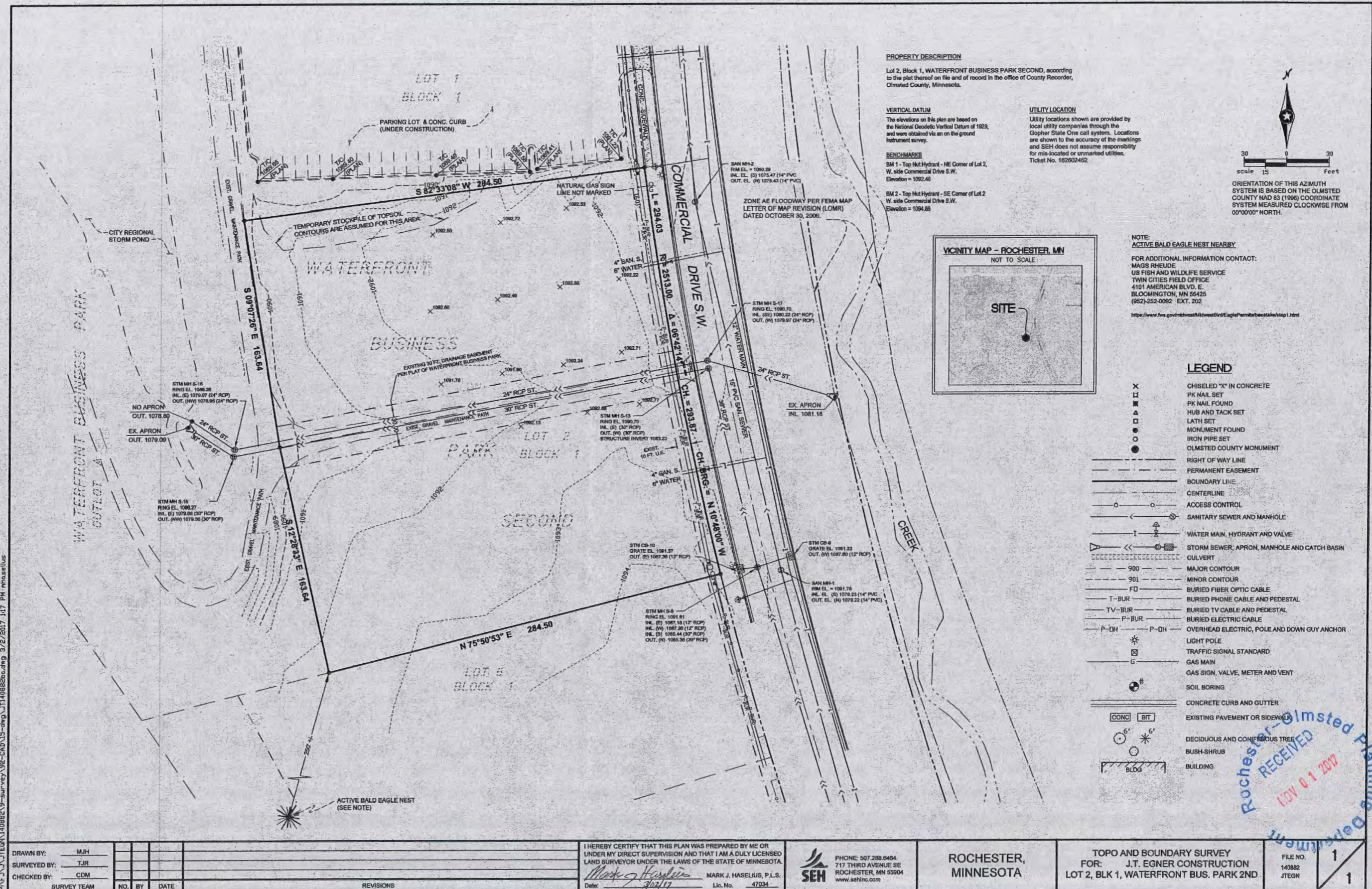
LE7500-OTR BULLET TRAP - OPTION A  
SCALE: 1/4"=1'-0"



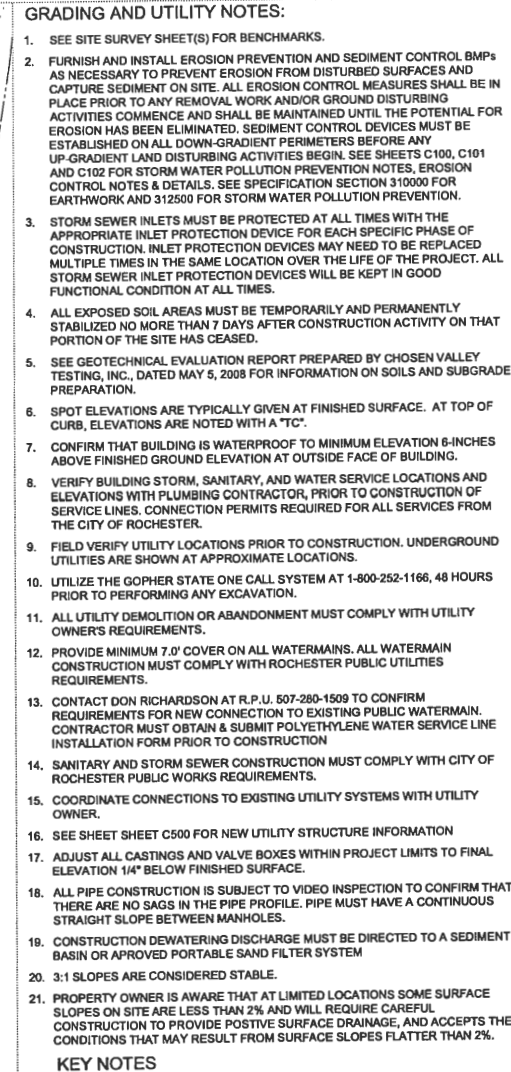
- RECOMMENDED, BUT NOT REQUIRED FOR  
LARGER RANGES, ADD 3'-4' OF SPACE BEHIND  
BULLET TRAP - FOR EASIER FUTURE ACCESS.  
SIDEWALL OR REAR WALL DOOR NEEDED TO  
ACCESS AREA.

LE7500-OTR BULLET TRAP WITH XWT TARGET SYSTEM - OPTION B  
SCALE: 1/4"=1'-0"

ITEM		PART NUMBER		DESCRIPTION		QTY
BILL OF MATERIALS						
APPROVALS		DATE		 <p>Meggitt Training Systems, Inc. 296 Brogdon Rd, Suwanee GA 30024, USA</p>		
DRAWN BY DWH		11.09.11				
MANF						
U. O. S.						
NEXT ASSY.		USED ON				
FINISH:		APPLICATION				
(DIMENSIONS APPLY AFTER FINISH)		INCHES		MILLIMETERS		<p>LE7500-OTR BULLET TRAP OPTIONS</p>
U. O. S. ALL DIMENSIONS IN INCHES (mm)		X ±.1		[X] ±2.54		
DIMENSIONS AND TOLERANCES PER ASME Y14.5M		.XX ±.02		[XX] ±.51		
WELDS PER AWS A2.4, BREAK SHARP EDGES .005-.010		XXX±.010		[XXX]±.254		
MAX SURFACE ROUGHNESS 125/		ANGLES ±.5° FRACTIONS ±1/16		WHOLE NUMBERS (X) ±1/16		
ALL MACHINED SURFACES ✓		THIRD ANGLE PROJECTION				
DO NOT SCALE DRAWING		SCALE: 1/4" = 1' - 0"		<p>SIZE D</p> <p>CAGE CODE 087W6</p>		<p>DRAWING NO. OPTIONS A AND B</p> <p>REV 1</p>
<p>DRW DATE FCN</p> <p>CONTROL LEVEL: 1</p>			<p>FILENAME: LE7500-OTR - OPTIONS A AND B</p>		<p>SHEET 1 OF 1</p>	







- 1 SEE CONSTRUCTION PLANS FOR STORM SEWER REALIGNMENT, WATERFRONT BUSINESS PARK 2ND, CITY PROJECT NO. J-5464, PREPARED BY SEH, INC. 3/18/2017.
- 2 FIRE DEPARTMENT CONNECTION
- 3 CLEANOUT
- 4 ABANDON WATER SERVICE AT MAIN PER RPU REQUIREMENTS.
- 5 GAS METER. COORDINATE UTILITY SERVICE INSTALLATION WITH UTILITY PROVIDER.
- 6 CONNECT TO EXIST. SANITARY SEWER STUB. FIELD VERIFY INVERT PRIOR TO CONSTRUCTION OF SANITARY SEWER SERVICE.
- 7 TRANSFORMER PAD. SEE ELECTRICAL SITE PLAN
- 8 STORM PIPE CONNECTION FROM DOWNSPOUT. SEE DETAIL 4/C500
- 9 CONNECT TO EXISTING WATER SERVICE STUB.
- 10 WATERMAIN OFFSET - SEE DETAIL 4/C901

DOOR / EXIT	
EXISTING INDEX CONTOUR	
EXISTING CONTOUR	
EXISTING CONTOUR DISTURBED	
PROPOSED CONTOUR	
SPOT ELEVATION	
DRAINAGE ARROW	
DRAINAGE DIVIDE	
NEW MAN-HOLE	
NEW DRAINAGE STRUCTURE	
NEW HYDRANT	
NEW GATE VALVE	
EXISTING SANITARY SEWER	
EXISTING STORM SEWER	
EXISTING WATERMAIN	
NEW SANITARY SEWER	
NEW STORM SEWER	
NEW WATERMAIN	
NEW SUB-DRAIN	
SOIL BORING	
GUTTER OUT	
EMERGENCY OVERFLOW	
CONSTRUCTION LIMITS	

5105 COMMERCIAL  
DRIVE SW  
ROCHESTER, MN

C400

GENERAL NOTES:

- A. SITE UTILITY SCOPE TO BE COORDINATED WITH (INSERT LOCAL UTILITY).
- B. BRANCH CIRCUIT HOMERUNS SHALL BE SIZED TO LIMIT VOLTAGE DROP TO 3% MAXIMUM USE #6 IN 1" PVC CONDUIT MINIMUM.
- C. REFER TO GROUNDING PLAN FOR GROUNDING REQUIREMENTS.
- D. REFER TO ELECTRICAL DETAILS SHEETS FOR POLE BASE INFORMATION, LIGHTING CONTROL DIAGRAMS, AND ZONE SCHEDULES.
- E. LIGHT POLES SHALL BE A MINIMUM OF 2' FROM CURBS AND SIDEWALK EDGES.
- F. ALL EXTERIOR LIGHTING SHALL BE CONTROLLED BY PHOTOCELL AND/OR ASTRONOMICAL TIME/CLOCK THROUGH RELAY AND INTERFACED WITH BAS SYSTEM. EXTERIOR LIGHT SHALL TURN OFF WHEN ADEQUATE DAYLIGHT IS AVAILABLE. CLOCK, RELAY & BAS SYSTEM.
- G. HOURS OF ILLUMINATION FOR PARKING AREAS: 50% OUTPUT FOR THE HOURS OF 12:00 AM TO 5:00 AM  
100% OUTPUT FOR ALL OTHER TIMES THAT PHOTOCELL IS ON
- H. COORDINATE TELECOMMUNICATIONS AND TV SITE CONDUIT REQUIREMENTS WITH OWNER AND UTILITY. PROVIDE ALL REQUIRED SPICES, PULLBOXES AND CABLE LENGTHS IN ACCORDANCE WITH UTILITY'S STANDARDS.
- I. CONDUIT ROUTES AS SHOWN ARE DIAGRAMMATIC IN NATURE. FIELD VERIFY ACTUAL CONDUIT ROUTES PRIOR TO INSTALLING CONDUIT. PULLBOXES PROVIDE PULL BOXES FOR SITE CABLEING AS REQUIRED, BUT NOT TO EXCEED MORE THAN 200' BETWEEN BOXES.

KEYNOTES:

1. EXISTING RPU JUNCTION CABINET.
2. PROVIDE 4" SCHEDULE 40 PVC CONDUIT FROM RPU JUNCTION CABINET TO NEW TRANSFORMER FOR PRIMARY SERVICE CABLE. COORDINATE WITH RPU.
3. PROVIDE CONCRETE PAD FOR NEW RPU UTILITY TRANSFORMER AND CONTRACTOR PROVIDED CONNECTION CABINET. COORDINATE WITH RPU. VERIFY THE FINAL LOCATION IS ACCEPTABLE BEFORE ROUGH-IN.
4. PROVIDE UNDERGROUND SERVICE LATERAL FROM CONNECTION CABINET TO SERVICE PANEL LOT. SEE RISER DIAGRAM SHEET E010. COORDINATE CROSSOVERS WITH OTHER SERVICES.
5. PROVIDE 3" PVC CONDUIT UNDERGROUND OUT TO PROPERTY LINE FOR CHARTER COMMUNICATIONS. COORDINATE FINAL LOCATION WITH CHARTER COMMUNICATIONS.
6. PROVIDE 3" PVC CONDUIT UNDERGROUND OUT TO PROPERTY LINE FOR CENTURYLINK. COORDINATE FINAL LOCATION WITH CENTURYLINK.



**HEARTLAND  
GUN CLUB  
& RANGE**

5105 COMMERCIAL  
DRIVE SW  
ROCHESTER, MN

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DAILY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

NAME: \_\_\_\_\_  
DATE: NOVEMBER 27, 2017  
REGISTRATION NUMBER: \_\_\_\_\_

[illegible]

ISSUANCE HISTORY	THIS SHEET
HGA NO:	4029-001-00

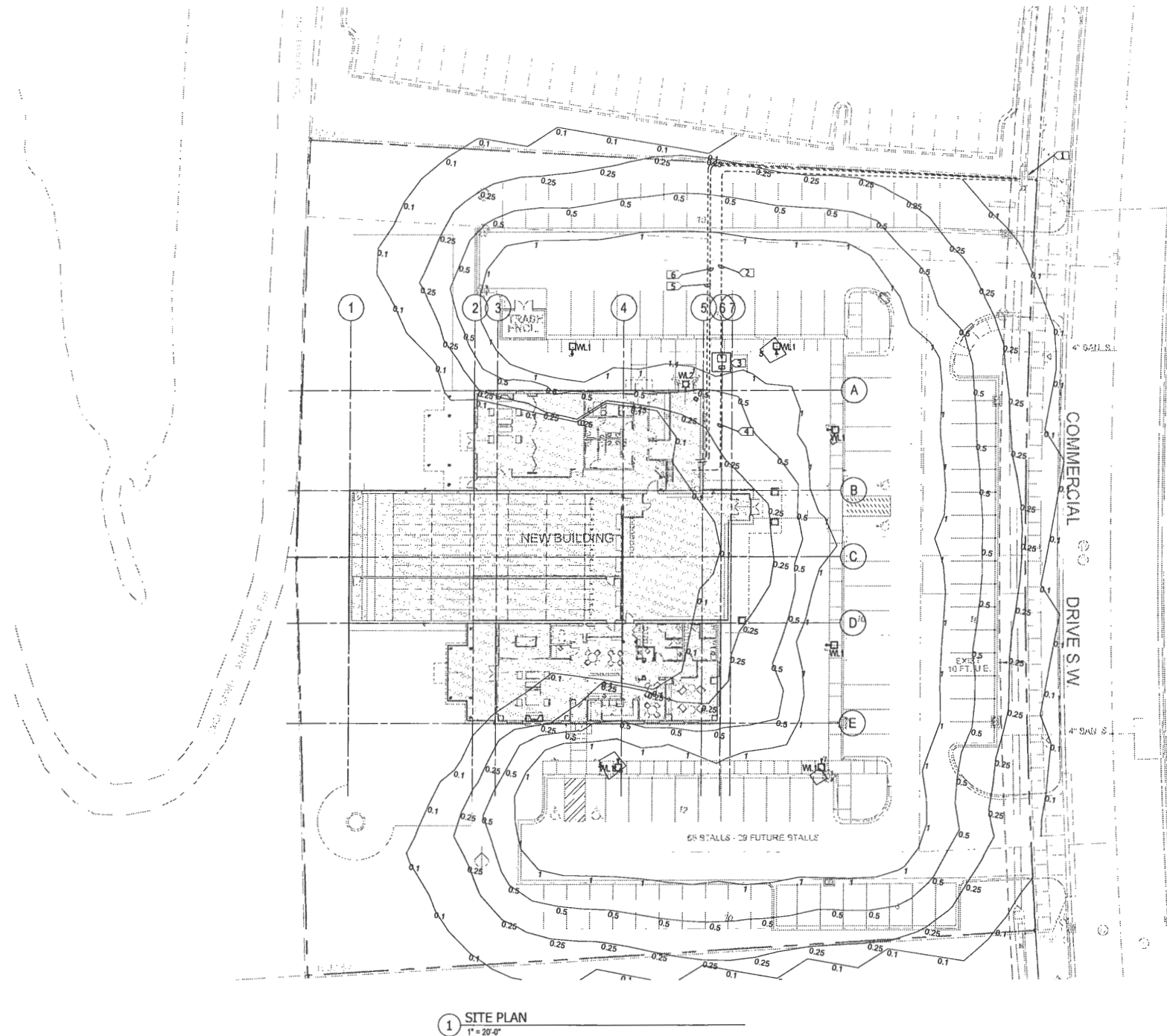
## SITE PLAN

DATE: OCTOBER 17, 2017

CITY REVIEW  
CUP APPLICATION

E030

**COPYRIGHT HAMMEL, GREEN AND ABRAHAMSON, INC.**



1 SITE PLAN  
1" = 20'-0"

LUMINAIRE SCHEDULE											AUTHORITY	
TYPE	DESCRIPTION	MOUNTING	LENS/REFLECTOR	VOLTAGE	LAMP/LUMENS	BALLAST/POWER SUPPLY	WATTS	MANUFACTURER	CATALOG NUMBER	EQUAL MANUFACTURERS	NOTES	REVISION HISTORY
WL1	FULL CUTOFF SINGLE HEAD LED POLE MOUNTED AREA LIGHT, TYPE V D1ST	20' SQUARE STEEL POLE		120 V	122400 LUMENS 4K		110 VA	BEACON	VPS48NB-110/4K/T4UNV/ R/RABBT	KIM, LITHDNIA, INVUE		
WL2	WALL MOUNTED EXTERIOR LED	WALL MOUNT		120 V	2000 LUMENS		22 VA	HUBBELL	LNC-9LU-4K-3-1			

Author 10/6/2017 3:30:11 PM C:\Users\mariana\Documents\Revit Local Files\E17-HCCSR\_402900100\_mariana.rvt